

## Section 1

**MANAGEMENT OF CHANGE (MOC)**

MOC No: 22794	Originator: Watson, Stephanie J.	Date Issued: 11/5/2010	Passport No:	EWO No:	ABU: RLOP	Plant: LNHF 13 Plant	Year: 2010
Section 2 Reviewer: Seidlitz, Michael R.	MOC Category: Routine	PSM:	MOC Type: Permanent	Expiration Date:	Other Temporary Reason		
Project/Equipment Title: R-1310 Max Bed Temperature override @ 750F and low priority alarm @ 760F - Update EOM with Bed Temperature Limit							
Description of Change: This MOC has been created to change the R-1310 bed temperature override high setpoint limit to 750F and add a low priority alarm at 760F. The alarm at 760F will be a high alarm and the metallurgical alarm at 825F will not be changed and will be a high-high alarm.							

~~All bed temperatures in R-1310 should remain below 750F to prevent excessive cracking in R-1310. Excessive cracking increases the molecular weight of the recycle gas. High molecular weight gases increase the recycle compressor power requirement. If the recycle gas becomes too heavy, the compressor will not have enough power to recycle the gas through the LNF. During a 7R run in September/October 2010 R-1310 bed temperatures went as high as 780F and resulted in high recycle gas molecular weight. As a result, the K-1300 horsepower requirements exceeded the capacity of the compressor for the existing process conditions. The recycle rate and other process variables began oscillating, which caused the plant to become unstable. Refer to IMPACT ERM LI#7 for additional information.~~

The 750F max bed temperature is below the point (780F) that K-1300 HP requirements exceed the capacity of the compressor driver. The 750F bed temperature was chosen so there is a buffer between the point at which the compressor had issues.

## MOC will be required if the change will:

- ☐ Cause the use of different feed, chemicals or catalysts?  
☒ Cause the use of different process conditions, process control, instrumentation, and protective devices or affect upstream/downstream plants?  
☐ Cause the use of new or modified equipment [which is other than inkind]?  
☐ Alter equipment siting, building, trailer locations, roads or fire protection?  
☒ Require modifying existing and/or developing new procedures?

☒ Simultaneously Begin Construction and Start-up

## Section 2

Stage 1	Pre-Implementation	Dept./Person Responsible	Date Complete	Completed By	References
	Design Review				
	Process Engineering Review	Watson, Stephanie J.	11/5/2010	Watson, Stephanie J.	
	Instrumentation Review				
	Control System Review	Carter, Grady E.	#####	Carter, Grady E.	
	Utilities Review				
	Environmental/Regulatory Review	Tarter, Donald J.	11/8/2010	Tarter, Donald J.	
	Safety/Regulatory Review				
	Building Permits Review	Linares, Elena E.	11/8/2010	Linares, Elena E.	
	Mechanical Review				
	Inspection Review				
	Metallurgy Review				
	Construction Review				
	Leak Seal Review				
	Relief System Review				
	Infrastructure Review				
	PHA/HSE Review	Watson, Stephanie J.	12/8/2010	Watson, Stephanie J.	

Authorization to Implement Change (Begin Construction): Approver: Seidlitz, Michael R. Date: 12/10/2010

Stage 2	Pre-Startup	Dept./Person Responsible	Date Complete	Completed By	References
	Procedures Review	Henrickson, Alan C.	1/11/2011	Henrickson, Alan C.	
	Communication/Training 1	Henrickson, Alan C.	1/11/2011	Henrickson, Alan C.	
	Pre Start-up Safety Review	Watson, Stephanie J.	2/22/2011	Watson, Stephanie J.	

Authorization to Start-Up Change: Approver: Seidlitz, Michael R. Date: 2/22/2011

Extension of Temporary Change  
Approved By:

Approver:	Expiration Date:	Extension Reason
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Stage 3	Post-Startup	Dept./Person Responsible	Date Complete	Completed By	References
	Communication/Training				
	Process Safety Information	McCall, Patrick D.	2/22/2011	McCall, Patrick D.	

Change in Place - Reviews,  
Documentation & Testing Complete

Approver: Seidlitz, Michael R.	Date: 2/22/2011
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MOC Cancelled:

Approver:

Date:

Cancellation Reason:

Note 1: Emergency request for change should be routed by the Approver on the next working day

Retain Original in Division for five Years

## PROCESS ENGINEERING REVIEW CHECKLIST

You have been assigned a Process Engineering Review.  
This checklist is a guide to help ensure that all information  
necessary to evaluate the change is considered.

MOC Number 22794  
Filing Reference  
Person Responsible Watson, Stephanie J.  
Completed By Watson, Stephanie J.  
Date Completed 11/5/2010

### Project/Equipment Title:

R-1310 Max Bed Temperature override @ 750F and low priority alarm @ 760F - Update EOM with Bed Temperature Limit

### DOCUMENTATION

- ☐ Drafting Work Requisition, MFG-5545
- ☐ Maximum Intended Inventory Update
- ☐ MSDS's
- ☐ PED Records
- ☐ Relief System Drawings

### PROCESSES REVIEW

- |  |  |
|--|--|
| <input type="checkbox"/> ASTM-TBP-EFV Distillation Relationships     | <input type="checkbox"/> Suppliers' Performance        |
| <input type="checkbox"/> BIN Best Practice                           | <input type="checkbox"/> Surface Tensions              |
| <input type="checkbox"/> Characterization of Petroleum Fractions     | <input type="checkbox"/> Thermal Properties            |
| <input type="checkbox"/> Composition & Flow Information              | <input type="checkbox"/> Upstream & Downstream Impacts |
| <input type="checkbox"/> Conversion Factor & Constants               | <input type="checkbox"/> Vapor-Liquid Equilibria       |
| <input type="checkbox"/> Delivery Needs                              | <input type="checkbox"/> Vapor Pressures               |
| <input type="checkbox"/> Densities                                   | <input type="checkbox"/> Viscosities                   |
| <input type="checkbox"/> Fundamental Properties                      |  |
| <input type="checkbox"/> Honeywell                                   |  |
| <input type="checkbox"/> Honeywell Process Simulator                 |  |
| <input type="checkbox"/> Material & Energy Balance                   |  |
| <input type="checkbox"/> New Catalyst of Feeds                       |  |
| <input checked="" type="checkbox"/> Operating Parameters             |  |
| <input type="checkbox"/> Physical Properties of Streams or Catalysts |  |
| <input type="checkbox"/> Solubilities                                |  |

### SUMMARY OF REVIEW\*

All bed temperatures in R-1310 should remain below 750F to prevent excessive cracking in R-1310. Excessive cracking increases the molecular weight of the recycle gas. High molecular weight gases increase the recycle compressor power requirement. If the recycle gas becomes too heavy, the compressor will not have enough power to recycle the gas through the LNF. During a 7R run in September/October 2010 R-1310 bed temperatures went as high as 780F and resulted in high recycle gas molecular weight. As a result, the K-1100 horsepower requirements exceeded the capacity of the compressor for the existing process conditions. The recycle rate and other process variables began oscillating, which caused the plant to become unstable. Refer to IMPACT ERM LI#7 for additional information.

The 750F max bed temperature is below the point (780F) that K-1300 HP requirements exceed the capacity of the compressor. The 750F bed temperature was chosen so there is a buffer between the point at which the compressor had issues.

As discussed above this temperature limit has a large buffer (~30F). R-1310 could operate above 750F and still be in a stable condition. However, there should be heightened awareness of the yields, recycle gravity, and compressor operation if this limit is changed in the future.

\*When possible include copies of documents referenced in the summary.

## CONTROL SYSTEM REVIEW CHECKLIST

You have been assigned a Control System Review. This checklist is a guide to help ensure that all information necessary to evaluate the change is considered.

MOC Number 22794

Filing Reference

Person Responsible Carter, Grady E.

Completed By Carter, Grady E.

Date Completed 11/10/2010

### Project/Equipment Description:

This MOC has been created to change the R-1310 bed temperature override high setpoint limit to 750F and add a low priority alarm at 760F. The alarm at 760F will be a high alarm and the metallurgical alarm at 825F will not be changed and will be a high-high alarm.

All bed temperatures in R-1310 should remain below 750F to prevent excessive cracking in R-1310. Excessive cracking increases the molecular weight of the recycle gas. High

### CONTROL SYSTEM:

- |   |   |
|---|---|
| <input type="checkbox"/> Alarm Objective Analysis                 | <input type="checkbox"/> Loop Diagrams  |
| <input type="checkbox"/> Analyzer Instruments                     | <input type="checkbox"/> P&ID Change due to New / Modified equipment                |
| <input type="checkbox"/> Chevron                                  | <input type="checkbox"/> P&ID's Change - Field condition not matching existing P&ID |
| <input type="checkbox"/> Control Objectives Analysis              | <input type="checkbox"/> Pressure Measurements                                      |
| <input type="checkbox"/> Control Room Design                      | <input checked="" type="checkbox"/> Process Alarms                                  |
| <input type="checkbox"/> Control Systems                          | <input checked="" type="checkbox"/> Process Control                                 |
| <input type="checkbox"/> Control Valves                           | <input type="checkbox"/> Relief Systems   |
| <input type="checkbox"/> DCS                                      | <input type="checkbox"/> Shutdown Systems   |
| <input type="checkbox"/> Egatrol                                  | <input type="checkbox"/> System Design  |
| <input type="checkbox"/> Electrical One-lines                     | <input type="checkbox"/> Temperature Measurements                                   |
| <input type="checkbox"/> Field Installation                       |   |
| <input type="checkbox"/> Flow Measurements                        |   |
| <input type="checkbox"/> Honeywell                                |   |
| <input type="checkbox"/> Honeywell Process Simulator              |   |
| <input type="checkbox"/> Instrument Seals, Purges and Winterizing |   |
| <input type="checkbox"/> Intrinsic Safety                         |   |
| <input type="checkbox"/> Ladder Logic Diagrams                    |   |
| <input type="checkbox"/> Level Measurements                       |   |

### SUMMARY OF REVIEW\*

No issues. Can change maximum setpoint on bed outlet override controls to 750 DegF (from 800). Override active alarm already exists. Will add 760 DegF alarm to bed temperature indicators.

\*When possible include copies of documents referenced in the summary.

## ENVIRONMENTAL REGULATORY REVIEW CHECKLIST

You have been assigned a Regulatory Review. This checklist is a guide to help ensure that all information necessary to evaluate the change is considered.

### Project/Equipment Title:

R-1310 Max Bed Temperature override @ 750F and low priority alarm @ 760F - Update EOM with Bed Temperature Limit

MOC Number: 22794

Filing Reference:

Person Responsible: Tarter, Donald J.

Completed By: Tarter, Donald J.

Date Completed: 11/8/2010

#### Check that all Apply:

- ☐ **Chevron:**
- ☐ **Yellow Book**
- ☐ **Correction or Alternations to Refinery Utility System (RI-503)**
- CITY OF RICHMOND**
- ☐ **CEQA (EIR's, etc**
- ☐ **City of Richmond Conditional Use Permits (Land use and Hazardous Materials)**
- Regulatory**
- ☐ **BAAQMD Air Regulations Permits (including Title V)**
- ☐ **BAAQMD Air Regulations: Additions, modifications, or deletions of VOC Components/Equipment (reg. 8-18 LDAR Program - equipment leaks/fugitive emissions)**
- ☐ **BAAQMD Air Regulations: Wastewater System components - reg 8-8 and NSPS QQQ (process drains, catch basins, manholes, sumps, cleanouts, oil-water separators)**
- ☐ **BAAQMD Air Regulations: Storage Tanks**
- ☐ **BAAQMD Air Regulations: Internal Combustion Engines**
- ☐ **BAAQMD Air Regulations: Flares**
- ☐ **BAAQMD Air Regulations: Boiler, Steam Generators, Process Heaters & Gas Turbines**
- ☐ **BAAQMD Air Regulations: SRU, Tail gas, or H2S Unit Changes**
- ☐ **BAAQMD Air Regulations: Long Wharf (Marine Terminal)**
- ☐ **Department of Transportation (DOT)**

#### SUMMARY OF REVIEW\*

No environmental regulatory issues.

\*When possible include copies of documents referenced in the summary.

## ENVIRONMENTAL REGULATORY REVIEW CHECKLIST

You have been assigned a Regulatory Review. This checklist is a guide to help ensure that all information necessary to evaluate the change is considered.

MOC Number: 22794

Filing Reference:

Person Responsible: Tarter, Donald J.

Completed By: Tarter, Donald J.

Date Completed: 11/8/2010

### Project/Equipment Title:

R-1310 Max Bed Temperature override @ 750F and low priority alarm @ 760F - Update EOM with Bed Temperature Limit

- ☐ EPA Benzene NESHAP (National Emissions Standards for Hazardous Air Pollutants) (process vents, storage tanks, wastewater systems, transfer operations, fugitive emissions)
  - ☐ EPA Benzene Waste Operations NESHAP (BWON)
  - ☐ EPA MACT (Maximum Achievable Control Technology) Standards and Subparts (process units, storage tanks, wastewater system, fugitive emissions)
  - ☐ EPA NSPS (New Source Performance Standards) and Subparts (storage tanks, flares, wastewater components, fugitive emissions, boilers, process heaters)
  - ☐ Chemical Inventory / Hazardous Materials Business Plan (e.g. New Chemicals:RI-313)
  - ☐ Risk Management and Prevention Plan (RMPP)
  - ☐ RWQCB Waste Discharge Orders, EPA Consent Agreement Sites
  - ☐ RWQCB NPDES Regulations/Permits
  - ☐ RWQCB SB-1050, Waste Discharge Requirements (WDR)
  - ☐ Spill Prevention Control and Counter Measures Plan (SPCC Plan)
  - ☐ Waste Regulations and Permit
  - ☐ Wharf and Shoreline Permitting related agencies (BCDC, Army Corps, SLC, USCG, OSPR, EPA)
  - ☐ Permit to Build and Remove Wells, County Permit Required
  - ☐ Activities impacting groundwater protection system (GPS) or WDO sites
- Yes No
- ☐ ☒ Any additions, modifications, or deletions of VOC Components/Equipment (including drains or wastewater components) that will change VOC identification/tag

\*When possible include copies of documents referenced in the summary.

## BUILDING PERMITS REVIEW CHECKLIST

You have been assigned a Regulatory Review. This checklist is a guide to help ensure that all information necessary to evaluate the change is considered.

### Project/Equipment Title:

R-1310 Max Bed Temperature override @ 750F and low priority alarm @ 760F - Update EOM with Bed Temperature Limit

MOC Number 22794

Filing Reference

Person Responsible Linares, Elena E.

Completed By Linares, Elena E.

Date Completed 11/8/2010

### SUMMARY OF REVIEW\*

MOC signed off. A City of Richmond building permit is not required based on the information provided in the scope of work, but is required for any new construction such as: electrical, instrumentation, pipe supports, structural modifications, and etc.

\*When possible include copies of documents referenced in the summary.

## INSPECTION REVIEW CHECKLIST

You have been assigned a Inspection Review. This checklist is a guide to help ensure that all information necessary to evaluate the change is considered.

**MOC Number:** 22794

**Completed On:** 11/8/2010

**Completed By:** Bosworth, Gregory A.

**Person Responsible:** Bosworth, Gregory A.

### Project/Equipment Description:

This MOC has been created to change the R-1310 bed temperature override high setpoint limit to 750F and add a low priority alarm at 760F. The alarm at 760F will be a high alarm and the metallurgical alarm at 825F will not be changed and will be a high-high alarm.

All bed temperatures in R-1310 should remain below 750F to prevent excessive cracking in R-1310. Excessive cracking increases the molecular weight of the recycle gas. High

Yes	No	Plant Protection/Security Review
<input type="checkbox"/>	<input checked="" type="checkbox"/>	City Fire-Plan Review is Mandato
<input type="checkbox"/>	<input checked="" type="checkbox"/>	City Fire-Permit is Mandato
<input type="checkbox"/>	<input checked="" type="checkbox"/>	City Acceptance Test is Mandato
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Office of Fire Prevention Review On

The scope of work has been reviewed by the Chevron Fire Marshal. Scope of work does not constitute a change in fire protection.

# HEALTH & SAFETY EVALUATION

Date Issued: 11/5/2010  
 ABU: RLOP  
 Plant: LNHF 13 Plant

Maximo Number: \_\_\_\_\_  
 EWO Number: \_\_\_\_\_

MOC Number 22794  
 Filing Reference \_\_\_\_\_  
 Person Responsible Watson, Stephanie J.  
 Completed By Watson, Stephanie J.  
 Date Completed 12/8/2010

Section 2 Reviewer: Seidlitz, Michael R.

Project/Equipment Title: R-1310 Max Bed Temperature override @ 750F and low priority alarm @ 760F - Updat

Description: This MOC has been created to change the R-1310 bed temperature override high setpoint limit to 750F and add a low priority alarm at 760F. The alarm at 760F will be a high alarm and the metallurgical alarm at 825F will not be changed and will be a high-high alarm.

Step 1: ☐ Notify USW ☐ USW Representation Present USW Representative:

Worker's Committee Member/Steward's comments if unable to attend:

☐ Notify Trainer ☐ TrainerRepresentation Present Training Representative: Alan Henrickson

Step 2: Involve: Operations, Maintenance, Technical and others with appropriate expertise relevant to the change (CRTC, Contractors, etc)

Attendees: Al Gordavez, Derrick Bell, Beau Liening, Terry Moore, Alan Henrickson, Steph Watson

Step 3: Think about the task at hand. Discuss the existing situation. Discuss the change. Discuss the impact of the change on the existing situation. Determine the training requirements for this change.

Step 4:

Training Type: 1

Develop a list of concerns, consider your options, consider your following:

\*H2S \*NH3 \*Acid \*Caustic \*Benzene \*Fall Protection \*Staging \*Scott Air \*PPE \*Hot Work \*Confined Space Entry \*Evacuation Plan \*Safety Operator

Concern	Consequence	Mitigation	Proceed Safely
Should the limit be set higher, such as at 755F?	If the limit is too low, the LNF could be artificially limited on feed rate. The LNF could potentially increase feed rate and bed temperatures above 750F and remain stable.	This limit was set with a buffer. A note was added to the PED section that this limit could potentially be increased in the future if the LNF is at the bed temperature limit. However, there should be heightened awareness around several process variables if this alarm limit is changed in the future. Also, the MOC process will have to be completed in the future if the limit is raised, so the safety aspects of going higher will have to be taken into consideration.	Yes
There is currently an alarm at 825F for the metallurgical limit.	There could be confusion of there are two alarms at different temperatures.	Add a high alarm for the 750F bed temperature limit and a high-high alarm for the 825F metallurgical limit.	Yes
By having an override set point, an alarm at 760F, and an alarm at 825F, will there be too many alarms?	Too many alarms will not help the situation and could cause confusion as to which alarms are intended for each purpose	This was found to be a non-issue because there is not an alarm at the override temperatures. The temperature will just change states (appear in red) if the override is hit.	Yes

HSE Action Items

## HEALTH & SAFETY EVALUATION

**Date Issued:** 11/5/2010

**ABU:** RLOP

**Plant:** LNHF 13 Plant

**Section 2 Reviewer:** Seidlitz, Michael R.

**Maximo Number:** \_\_\_\_\_

**EWO Number** \_\_\_\_\_

**MOC Number** 22794

**Filing Reference** \_\_\_\_\_

**Person Responsible** Watson, Stephanie J.

**Completed By** Watson, Stephanie J.

**Date Completed** 12/8/2010

**Project/Equipment Title:** R-1310 Max Bed Temperature override @ 750F and low priority alarm @ 760F - Updat

**Description:** This MOC has been created to change the R-1310 bed temperature override high setpoint limit to 750F and add a low priority alarm at 760F. The alarm at 760F will be a high alarm and the metallurgical alarm at 825F will not be changed and will be a high-high alarm.

### Additional Comments

## PROCEDURE REVIEW CHECKLIST

You have been assigned a Procedure Review. This checklist is a guide to help ensure that all information necessary to evaluate the change is considered.

MOC Number 22794

Filing Reference

Person Responsible Henrickson, Alan C.

Completed By Henrickson, Alan C.

Date Completed 1/11/2011

### Project/Equipment Description:

This MOC has been created to change the R-1310 bed temperature override high setpoint limit to 750F and add a low priority alarm at 760F. The alarm at 760F will be a high alarm and the metallurgical alarm at 825F will not be changed and will be a high-high alarm.

All bed temperatures in R-1310 should remain below 750F to prevent excessive cracking in R-1310. Excessive cracking increases the molecular weight of the recycle gas. High

- ☐ Alarm Procedures
- ☐ Any Special or unique hazards
- ☒ COD/Ops Monitor
- ☐ Consequences of deviation
- ☐ Control measure to be taken if physical contact or airborne exposure occurs.
- ☐ Precautions necessary to prevent exposure, including administrative controls, engineering controls, and personnel protective equipment.
- ☐ properties of, and hazards presented by, the chemicals and operation of the process.
- ☐ References to additional procedures, such as Safe Work Practices
- ☐ Routine Duties
- ☐ Safety system and their functions
- ☐ Steps required to correct and/or avoid deviation

#### Steps fo each operatong Phase

- ☐ Emergency
- ☒ Normal
- ☐ Start-Up/Shutdown
- ☐ Temporary

### SUMMARY OF REVIEW\*

Updated information has been added to LNFPE05, LNF COD of Vol.1, process description and COD table.

\*When possible include copies of documents referenced in the summary.

# Stage Two Training and Communication Review

1/29/2013 10:08:15 AM

- ☒ Identify the affected employees.
  - \* Maintenance and Technical affected?
  - \* Employee who will require training to start up the change based on the level of training.
  - \* Employees who will receive training after the start up BUT before they can perform work affected by the change
- ☒ Procedures have been modified/written (Ops/SSO/Trainer)
- ☐ Identify the affected employees..
  - \* Lesson plan cover sheet (includes training objective statement and list of affected employees)
  - \* Procedural changes (Standing Orders, mark-ups)
  - \* Flow daigrams (final or mark-ups)
- ☐ Determine level of training
- ☐ Training has been scheduled
- ☐ Affected employees have been trained in order to start up the change.

MOC No: 22794

Date Completed: 1/11/2011

Completed By: Henrickson, Alan C.

Person Responsible: Henrickson, Alan C.

## Project/Equipment Title:

R-1310 Max Bed Temperature override @ 750F and low priority alarm @ 760F - Update EOM with Bed Temperature Limit

## Summary of Review:

Updated information has been added to LNFPE05, LNFCOD of Vol.1, process description and COD table.

## APPENDIX III

### PRE-START-UP SAFETY REVIEW CHECKLIST

You have been assigned a Pre Start-Up Safety Review. This checklist is a guide to help ensure that all information necessary to evaluate the change is considered.

Passport No: \_\_\_\_\_  
EWO No.: \_\_\_\_\_  
MOC PSSR.: 22794.001

MOC Number 22794  
Filing Reference \_\_\_\_\_  
Person Responsible Watson, Stephanie J.  
Completed By Watson, Stephanie J.  
Date Completed 2/22/2011

#### Project/Equipment Description:

R-1310 Max Bed Temperature override @ 750F and low priority alarm @ 760F - Update EOM with Bed Temperature Limit

#### Subsystem:

**NOT** The PSSR facilitator shall involve employees with expertise in process operations, maintenance, and engineering, based upon their experience and understanding of the process system being evaluated.

#### The following requirements for PSSR shall be addressed:

1. Has the equipment and construction been completed in accordance with the critical design specifications?  
Some examples of how this may be accomplished are:
  - \* Review of equipment quality assurance and inspection records.
  - \* Review of construction inspection records.
  - \* P & ID "check" after mechanical completion, and facility "walk-through" inspection.

**Justification:** Bed Overrides have been added to DCS

Approved by: \_\_\_\_\_  
Date \_\_\_\_\_  
Watson, Stephanie J. 2/22/2011

2. Are Safety, operating, maintenance, and emergency procedures in place and adequate?
  - \* The phrase "in place and adequate" means: written, reviewed, approved, and accessible to employees requiring the procedures in their work.
  - \* This does not prevent the use of "mark-up" procedures to satisfy the requirement, but these must undergo the same review and approval and training interaction as would "the final version" of the same procedure and would require rigorous control.

**Justification:** Yes - EOM has been updated

Watson, Stephanie J. 2/22/2011

3. Has the communication or training of affected operating, maintenance, or contract workers been completed?
  - \* Maintenance employees, contractors, and other employees whose work is affected by the change must be informed of the change and training in the impact on their job tasks before the changed equipment is started up.

**Justification:** yes

Watson, Stephanie J. 2/22/2011

4. Have the quality assurance goals of mechanical integrity been met?
  - \* Ensure that changes are suitable for the intended service.
  - \* Ensure that the quality of the work is acceptable.
  - \* Ensure that the quality of the Leak Seal is acceptable.

**Justification:** N/A

Watson, Stephanie J. 2/22/2011

5. Have all recommendations resulting from PHA's or HSE's been addressed or resolved?
  - \* Ensure all Recommendations have been documented as addressed or resolved

Watson, Stephanie J. 2/22/2011

### APPENDIX III

## PRE-START-UP SAFETY REVIEW CHECKLIST

You have been assigned a Pre Start-Up Safety Review. This checklist is a guide to help ensure that all information necessary to evaluate the change is considered.

Passport No: \_\_\_\_\_  
EWO No.: \_\_\_\_\_  
MOC PSSR.: 22794.001

MOC Number 22794  
Filing Reference \_\_\_\_\_  
Person Responsible Watson, Stephanie J.  
Completed By Watson, Stephanie J.  
Date Completed 2/22/2011

### Project/Equipment Description:

R-1310 Max Bed Temperature override @ 750F and low priority alarm @ 760F - Update EOM with Bed Temperature Limit

### Subsystem:

Justification: Yes

Are there any safety-related exceptions encountered during the PSSR that require follow-up after started up? ☐ Yes

### Miscellaneous Comments:

<i>Exception</i>	<i>Owner</i>	<i>Completed By</i>	<i>Completed On</i>	<i>Notified</i>
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PSI REVIEW CHECKLIST

MOC Number	22794
Filing Reference	
Person Responsible	McCall, Patrick D.
Completed By	McCall, Patrick D.
Date Completed	2/22/2011

Project/Equipment Title:

R-1310 Max Bed Temperature override @ 750F and low priority alarm @ 760F - Update EOM with Bed Temperature Limit

PSI Documents

SUMMARY OF REVIEW\*

Procedures updated and posted to the EOM. COD table updated.

\*When possible include copies of documents referenced in the summary.